/7 cont./

132 The life of the inhabitants is determined by the sharp division of the seasons. The rainless period lasts from May to the end of September, and farther north even until far into October. Then broad sandbanks (praias) are exposed everywhere, with the sun [22] beating down on them day after day. For the Indians this is the real period of river life. Fishing then governs all interests. With the beginning of November the rainy season has usually already set [133] in with strength; in December and January the river is highest, ten to twelve meters above the low level. From bank to bank, without interruption, a tremendous mass of water fills the bed, flooding the neighboring low plains for some distance.

136 Swarms of annoying insects, mosquitoes and pium /a very 221 small mosquito/, which are completely absent in the dry season, now fill the air. The Indian is forced to retreat to higher ground, where he then attends to cultivating the fields and, if need be, [226] hunts. Fishing can be carried on only in the lagoons at this time.

133 When the water lowers, bad fevers are not uncommon on the 164 middle Araguaia, where extensive swamps accompany the river.

Hordes. The Karaya of the Araguaia are divided into the 101 three large tribes of the Yavahẽ, Karayahi, and Šambioa, which [161] together may number about 4,000 persons. The first inhabit the [131] interior of the still completely unknown Bananal Island. We know [361] only this much about it, that in its northern part there is a large lake near which the three villages of the Yavahẽ are located. It has an outlet into the eastern arm (furo) of the Araguaia, at the mouth of which some of these savages were spoken to for the last 177 time in April, 1888. In the meantime no one has sought them out here, although they have indicated several times their desire to trade with the colonists. They badly need iron tools, which now come to them only rarely through the agency of the Karayahi. In the villages of the latter one sometimes meets some Yavahẽ. They do not like to leave their hiding place in large numbers, since they justifiably fear importing epidemic diseases.

361 The Karayahi live in 12-15 villages of various size on the west arm of the Araguaia in the region of the navigable stretch from S. José below the mouth of the Crixas to the region of S. Maria.

/12 cont./

342 184 Only rarely does one see among them the characteristic solid house-construction of the Šambioa and then only in smaller 351 364 dimensions, without any particular care in the construction. Since all the scraps are simply strewn on the ground, the refuse gradually [136] becomes unbearable. The vermin multiplying in large numbers, especially the sand fleas, finally force them to abandon the place. 342 In the rainy season the Karayahi move into stronger, buriti-leaf [361] covered, open ranchos on the high bank, which do not in other respects differ in form from those customary among the Brazilian population.

/13/ The "summer huts" of the Šambioa are very much more [184] carefully and neatly built. Here the greater diligence, industriousness, and the comfortable well-being of the free son of the wilderness are manifest, in contrast to his "tame" tribal brother vegetating in oppressive conditions and dependent on civilization. [361] Not in disorder, but in long rows, forming real streets, these houses with their impeccable cleanliness make an uncommonly friendly and comfortable impression (Pl. IV /see p.106/, 1, and Pl. V /see p. 107/).

621 In the first Šambioa village we counted 60 huts, in the second 30, in the third 45, and in the fourth 90, each of which is inhabited by one or two families.

The individual villages are distinguished by special names. 342 The basic form of the house is rectangular; the narrow side [335] with the door faces the street. The frame consists of three or four flexible poles on each side carried over forked supports and held together with those on the opposite side by means of cipos, thus /Fig. 3 appears here/ forming a boat-like, arched roof, which is further supported by some vertical poles set in the ground in the long direction (Fig. 3 /see p. 22 /). These, as well as the forked supports, are connected with one another by as many strong horizontal poles as are necessary. Thin laths are placed lengthwise [824] and parallel to one another on the outside over the ribs of the roof and serve as supports for the strong pinnate leaves of the uaguassú palm (Attalea spectabilis), which, in several layers, form a fairly waterproof roof. Their leaf pinnae are also entwined with one another into a very solid plaited work. These plaitings serve

/16 cont./

(arikoko). One specimen in the collection is carved out of wood in its natural form (Fig. 4 and Pl. I /see p. 103/, 1).

Preparation of food. Directly in front of the house door is found the cooking place, surrounded by low pole frames on which the squeezed manioc is dried. Large earthen pots stand on stones or clay supports over the fire. The ground around is littered with scraps. These heaps are the breeding places of annoying gray flies (the so-called mosca da aldeia), which sting badly and, when they get out of hand, necessitate abandoning the place.

Untiringly the women are busy throughout the day with dragging in the field produce and firewood, the preparation of manioc, pounding maize, opening palm nuts, and the careful supervision of all the culinary processes, in which the Indian housewife, despite the simplicity of the materials, knows how to achieve a relatively great diversity.

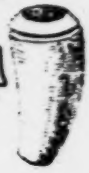


Fig. 4. Tobacco pipe (1/4).

Fire is still made wholly in the original way by means of the drill (hădă). It consists of two sticks. The thicker one, wood of the urucú plant, is fixed on the ground after a shallow cavity provided with a deep cut at the side is made near one end. Then the point of the second, thinner stick of taquara /Chusquea sp./ is set in this and is twirled between the palms with strong pressure until a hollow is formed at this point, out of which the glowing dust flows through the notch at the side and can be collected. Thus the procedure is precisely the one illustrated and described by Im Thurn (op. cit., p. 258). As in the method used by the Warrau /Warao/, no special tinder is needed. The pulverized wood itself supplies it. To kindle a livelier flame, dry strips of palm leaf are mixed with the easily flammable red resin (tamararu), which is like sealing wax, and then lighted.

/189 cont./

about five years; it is inhabited by civilized Indians who prefer the advantages of civilization (tobacco, salt) to living together in the tribe.

Between the two hordes there is an intervening space of a six and a half days' boat-trip (calculated downstream). As the reason for the unhabited state of this intervening area the Indians told me that they lived here on the high banks only during the rainy season, that in the dry season only a few and poor sandbanks were exposed and there were a great many mosquitoes; two facts which I am able to confirm. As a transit area, however, it is busily used; on both the journey upstream and downstream I came across migratory villages here in both directions.

Thus we come to 23 fixed villages.

The size of the villages varies greatly. In the north horde there were villages with one to eight houses; altogether I counted about 80 houses, so that on the average there were five to six houses to a village. In the south horde there were villages with one to four houses. Altogether I counted about 20 houses, so that on the average there were two to three houses to a village. The number of houses in both hordes together is therefore only about 100.

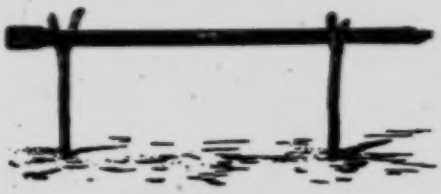
The number of inhabitants likewise varies. There were:

	North Horde	Koru-mare's Village	South Horde	Total	Immi-grant Šavajé	Total
Men:						
Adults	114	–	27	141	3	144
Youths	57	–	15	72	1	73
Boys (1-12 years old)	141	–	28	169	1	170
Total	312	ca. 20	70	402	5	407
Women:						
Adults	164	–	38	202	7	209
Maidens	22	–	12	34	3	37
Girls (1-12 years old)	129	–	28	157	1	158
Total	315	ca. 20	78	413	11	424
Total for both sexes	627	ca. 40	148	815	16	831

/199 cont./

417 Outside the houses, on the other hand, there are special storage racks (ǒdēdŭ). They consist of four forked sticks about one and a quarter meters high, which are set up in the form of a square and joined together by two crossbeams and many longitudi-
[251] nal beams. On these racks lie supplies of all kinds, manioc roots, unused implements and weapons kept on hand, as well as raw materials of all kinds; hung on them are gourds and baskets full
[287] of maize and feathers; the bast aprons of the women are also often hung here to dry (Ill. 24).

[215] For drying the lines used to fish for turtles, special racks made of two long vertical poles joined at the top by a cross-pole are used. The line, hanging far down, is hung on this to dry (Ill. 25).



Ill. 23.
Arrow-stand in the house.

[824] /200/ Fresh gourds are stuck on sticks to dry; near each house one sees groups of such staked gourds. Later, they are preferably stored by tying a whole number together on a stake (Ill. 26a and b).

354 Other household equipment is lacking. The hearth is outside
184 the house, in contrast to the Šavajé, among whom it is located in the round structures (see "Food" /see pp. 165 ff./); it was only in the modified houses in Schischá at the end of October that cooking was also done in the house. /Ills. 24 and 25 appear here./

364 House and environs are not very clean; food remains such as fish bones, nut shells, and bones, as well as wood, tools, etc., lie about everywhere. While it is dangerous just to come near the
[136] villages and houses with bare feet, the vast number of flies and other insects that gather in masses on the refuse is an obstacle to remaining outside the houses.

/200 cont./

to remaining outside the houses. In addition, there are the sand flies, /Ill. 26 appears here/ which, according to Ehrenreich, become so rampant that the Indians are forced to change their place of residence often (see below under "Village" /see p. 85 /).

Ill. 24.
Storage rack. Drawn from a photograph.

Ill. 25.
Rack for drying the turtle fishlines.

Ill. 26.
a) Drying gourds.
b) Storing gourds.

There are no privies. To attend to their needs, the Indians go to a depression in the sandbank, behind the nearest bush, or into the woods. To clean themselves they use three small sticks which they break from a bush and then place parallel over the excrement. The urubus, which live in great numbers near the settlements, quickly take care of cleaning the place. In order to piss the men go to the river. Here they go into

/241 cont./

136 yields. The country is also relatively poor in useful animals, and almost all of the few animal species that can be hunted are not eaten by the Indians, with the exception, to be sure, of the wild pig. The birds are very numerous; with the exception of the mutum, however, the Indians do not seem to hunt any other bird. Thus, the water must supply the principal food. The river is extremely rich in fish and turtles; everywhere, in shallow places, in the depths, in lakes, but above all in the tributaries, one comes across a quite startling abundance of fish. But even this abundance is not fully exploited, since a few types of fish are not eaten.

A. The Acquisition of Plant Food.

462 The women essentially are responsible for the gathering of wild plants and fruits, while the men engage above all in pro-
222 curing animal food (1). The following come under consideration:

> 1. This division of labor is ancient. In the myth, "How the Karajá acquired manioc," it is said of the father that he would not notice the theft of maize because he only knows fishing (see there /see pp. 302-303/).

the small oitŭ fruits, which are gathered in the forest during the first half of October; the pikĭ fruits (lămă), which ripen during the second half of October; the watermelon (kūblāke), which grows on the sandbanks at the place where the banks are connected with the shore. The Indians know exactly those sandbanks on which the melons grow and gather them as early as the end of October when
222 the fruit is not yet quite ripe. Of palm fruits the following are
262 eaten: the seeds of the tucum palm (hālŭ), of the so-called coceiro (āhăndĕtĕ), and of the oaguassu palm (haûlēnĭ), the roasted seeds of which are called haûlēnĭdŏ. The fruits of the jatobá tree (kūwă) and of the genipap (bădēnă) are likewise eaten. Another fruit, from which a black dish is prepared, was called ādómo; it is

/244 cont./

527 Regular harvest festivals probably do not take place; the time of the ripening of the food plants, that is to say, the time when they have a great deal to eat, is their chief festival time, however.

B. The Acquisition of Animal Food.

433 The acquisition of animal food is as yet limited to the appropriative form; the Indians have not arrived at animal breeding.

231 To be sure, they keep a great many animals in their
825 houses, but do not use them for food, nor do they mate them,
[262] but rather, after loss, they catch young specimens again to tame these anew. This pleasure in animals arises from the belief that animals are related to man, are the same in essence; they believe that animals speak and act like human beings, only in a different form. And so they surround themselves with them in
[235] order to divert themselves by their behavior. Only birds are kept for practical purposes, namely, as suppliers of feathers; they are repreatedly robbed of their feathers, which are then made into ornaments. Tamed quadrupeds, as well as chickens, usually run around free; birds have their wings clipped or they are tied to a pole on the roof, in the hpuse, or under a special protective
[438] roof (Plate 54, Ill. 1). Apparently there is a trade in birds, for several times I observed wandering Indians who carried little birds with them in small gourds, in order to sell them in other places. /Plate 53 appears here./

231 /245/ Of such domestic animals, I observed the following:
● [136] Of foreign, imported animals there were: chickens [(h)ănĭ(k)ĕ], pigs [(ĭ)šă(nĕ)], dogs (kjŏlŏză), cats [(găh)ănlōĕnĕ]. These
[262] animals are not eaten; the Indians are not even acquainted with the eating of chicken eggs (hănĭkĕsĭ). Pigs are very rare; I saw only one large domestic pig, which was quite obviously kept only out of curiosity.

[TEXT CONTINUES ON P. 155]

/248 cont./

223 until the uppermost one, finally, closed the opening of the little pyramid. Strings ran down along the edges, were fastened to the lowest rods, and crossed at the top on the surface; they barely held the whole construction together. The type of release is clearly shown in the sketch, Ill. 84.

[198] To lure birds and game the Indians use specific calls which differ according to the particular species of animal, as they know how to imitate animal sounds masterfully.

Birds must be plucked on the spot; they may not be brought to the village unplucked ("otherwise the chief will be angry"). While plucking, the fingertips are dipped in wood ashes.

223 224 [538] It is said that there are no magic devices for making the hunt productive; on the other hand, the Indians are fond of telling one another hunting stories, and, in doing so, they like to exaggerate and tell improbable things.

Ill. 84.
Construction of the bird trap.

226 362 Fishing supplies by far the largest portion of the meat food; the subsistence of the Indians is to a large extent based on it.

136 The Araguaya is extremely rich in fish (kǎdõlǎ); still richer, however, are the tributaries, especially the Rio Tapirapé and the many lakes that accompany these rivers on either side.

In the deep water of the lakes and on the high, steep banks, especially where fallen trees lie in the water, live the pirarucú (b'dõlěkě; Sudis gigas), three to four meters long, and the pirarara (dọlě; Phractocephalus discolor), which is equipped with strong bone armor and is up to two meters long. Upon being pulled out of the water, it emits air with strange sounds; the humorous Indian likes to imitate these sounds in his songs. Furthermore, the dogfish (lãdã), with its powerful teeth, lives here, and above all the worst predatory fish, the piranha. Various

[533] [825]

/248 cont./

136 kinds are distinguished: the small yellowish one with a black circle on its cheeks, the whitish-red one (dūĕtă, kjūĕtă), and the huge black, red-eyed piranha (dūŭlĭ), the largest specimens of which reach a length of 48 centimeters. The piranhas are vicious predators. When they scent wounded animals or fish, they hasten to them in droves and in a few minutes reduce a whole animal to a skeleton. They leap high out of the water in their greed, so that at such places huge eddies of water and fish are produced and gradually collapse again. It even happens that they injure
126 and devour each other. They live in vast numbers and huge specimens in the Tapirapé especially, and even the Karajá were /Plates 54 and 55 appear here/ /249/ astonished when a dogfish, hit in the head by a vertical shot from the boat, was pulled up after a few minutes as a mere skeleton on the arrow. The meat of the piranha is very tasty; but since the animals seldom come to the surface and can be caught only with the fishhook, they play only a minor role in the economy of the Indians. The latter, however, prize them and, whenever they can, seek to obtain possession of strong fishhooks that can withstand the strong teeth of the animal, and similarly tin to surround the part of the fishline around the hook like a mantle and thus protect it from being bitten through. In spite of this, a number of hooks thus equipped are regularly lost.

The pintado (Pimelodus sorulum), which is up to two meters long and has good yellowish meat, lives in shallow water, where the Indian can hunt better with bow and arrow, I saw matrincham, tokunaré, pacú (ālĭwă) caught relatively rarely. The carí fish lives in the caves of the steep banks and may be pulled out by the tail: it is an extremely tasty fish, which, however, has only a little meat in its armor.

136
262 Many fish, especially scaleless ones, such as aruana (ĭdjăzŏ) and others, are not eaten. Similarly the giant dolphin (boto: būhă) is not utilized; its droll movements and its puffing merely afford the Indian occasion for mirth and humorous imitation.

[Text continues on p. 163]

/358 cont./

301 Dance belts (wădăkănă̆) of the male youth are not as elaborate as those of the Karajá, but are kept essentially simpler. One specimen is striped black and white lengthwise; on its lower edge, on a separate string, hang two bunches of Thevetia fruits and one to three feather rods, alternately. The other one, coming from Schischá, in addition to the lengthwise stripes, exhibits a cross-striping; on its lower edge, directly alternating, are fastened at each place two pairs of Thevetia fruits and one feather rod (Pl. 59, Ill. 12).

262 6. Food. The Šavajé, like the Karajá, live on the fish
● 136 that they catch and the yield from their plantings. The lake on which they live is extremely rich in fish, in spite of its shallow depth (0.75 to one meter); there were even pirarucús
311 in it. The planting lay far from the village, about six or seven hours away, on the edge of the rainy-season lake. It was growing extremely well and so thickly that one could scarcely follow the path in it. Close beside the new planting there was an older one.
482 Here and there filled back-baskets lay by the wayside, waiting to be picked up.

257 The manioc is pounded in a knee-high mortar (kōŏ̆) which
[912] has an approximately finger-thick wall, with a pestle (hāâû) of reddish wood 1.6 meters long and 0.10 meters thick, or it is rubbed on a wooden grater (wōlānă̆kĭă̆), /359/ picked over on the rod-sieve (brēdjĕ̆), and pressed in it. Then this meal is
262 mixed with water and cooked. Such manioc mush (ĭūālŭ̆) also constitutes the chief food of the Šavajé. In addition, I also saw yellow mush and green vegetables as festive foods.

226 Fishing was done by the young people with bows and arrows. Early in the morning they would already go out on the
[123] lake and soon return with a good yield. I received my share of everything, even of the huge pirarucú which was caught on the second forenoon. The lucky fisherman took out the entrails of the animal and then cut out the sides of the belly, which were distributed by the chief and placed on different piles. Then the rib pieces of three ribs each were chopped out and likewise distributed. Every family received its share; I, too, was given some.

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

large dugout trough near a tree, then a rough slab of wood, fitting loosely into the trough, is placed upon the manioc, and upon this again still other large blocks of wood are built up, all of which become the fulcrum for a heavy beam, the base of which is secured in a mortice in the before mentioned tree; and lastly, heavy weights are piled upon the outer end of the beam. The meal is dried by placing thin layers of it upon an elevated surface, like a huge griddle, under which is a light fire, then stirring it with a wooden hoe. 114

I saw here, near the dwelling, a valuable fruit tree with hollow limbs in which five or six species of wild honey bees had established themselves. There are a great many kinds of wild bees in Brazil, but none of them, I understand, has a sting; and what is still more remarkable, all, or nearly all, make acid honey—or *sour* honey, as we commonly say. It is used as a drink, which is much prized, by mixing one part honey to five or six parts water and sweetening it with sugar. The expression, "sweet as honey," would be meaningless to many Brazilians. That honey needs to be sweetened with common sugar appears strange indeed. 136 [000]

At length, all the manioc meal we needed, or could carry, was made and stowed into the canoes, and we resumed our voyage. I was astonished at the great quantity of this food stuff we were taking with us. Our canoes were loaded to the water's edge with it, and we seemed to have sufficient to feed half a dozen horses a month. But as we journeyed, and I saw the tremendous eating capacity of our Cherente, Karayá and Brazilian canoe men, I was convinced that we had none too much of the meal. These men seemed never to reach their limit—if they had a limit—for they always continued to eat as long as there was anything to levy upon. Their common dinner "plate"—or trough—was a large pan with a capacity of over half a bushel. Around this they all squatted, as it rested upon the ground, and devoured, a few with iron spoons, and the others with nature's five-tyned forks, gathering the food into large balls and tossing it into their mouths. One day, a large, fish-eating bird, called a 114 [261]

manguary, [136]

6:Cook M-3,4 (ca. 1900) 1909
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114 manguary, was shot, which filled our largest pot while cooking. When it was done, our men filled their bushel "plate" half full of manioc meal and poured the pot of game, with the liquid, over it. Just as they finished devouring this mountain of food, two of our party, who had gone fishing, returned with two very large fish; and "to save the fish from spoiling," they at once prepared and boiled a big pot of it, poured the mess over another half bushel of manioc meal, and soon this second heap of food disappeared also.

Fortunately for us, the annual rise of the river was late this year, therefore the *praias*—extensive sand bars—were still exposed. We needed these places to camp upon at night, as it was difficult or dangerous to sleep in the forest on the main land because of insects, reptiles and wild beasts. The [135] mosquito tribes are highly developed in the tropics, for they have the whole of every year in which to perfect themselves. Some varieties, called "powder" by the Brazilians, are mere specks and can fly through ordinary mosquito netting.

136 Many large and interesting creatures live in the Araguaya river. The *loutra* is the king of the river. It is a kind of river dog, or fresh-water seal. Its body is about five feet in length and it has four very short legs. It subsists entirely upon fish; but it lands on the beach to wander about, and bears its young in a hole which it digs in the bank of the river. When it pokes its head above water while in the river, it appears to be an enormous bull dog. I must confess that I was not a little startled when the head of one appeared above the water close to where I was about to go in bathing, as I had never seen the creature, nor knew of its existence.

Another interesting creature is the fresh-water dolphin, called a *bouto*—stub nose. It is a slate-colored carnivorous mammal which attains a length of ten feet, and a weight of six hundred or a thousand pounds. Its head resembles that of the hippopotamus; but it has no legs, and cannot leave the water. These beasts are very numerous in the Araguaya, or where fish are abundant, for I have seen as many as three pairs

6:Cook M-3,4 (ca. 1900) 1909
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within fifty or one hundred yards of our canoe diving for fish and rising to the surface every moment to blow, whale-like. They can be captured only with a harpoon, but are rarely killed voluntarily by either the civilized or savage natives, though their fat is known to yield an excellent oil for lamps, for there is no animal in the Amazon region that is the subject of so many fables as this creature. The superstitious people believe that blindness would result from the use of this oil in lamps. One fable represents the *bouto* as a kind of mermaid, or siren; and is to the effect that it once had the habit of assuming the form of a beautiful woman with hair hanging loose to her heels, and coming ashore at night and walking through the streets of a village to entice the young men down to the water. If any one was so much smitten as to follow her to the water's edge, she grasped him around the waist and plunged beneath the waves with a triumphant cry. A man told me that if a human being were drowning in the river and a *bouto* should be near, it would succor him and bear him to land.

Fresh-water turtles exist in vast numbers in the Amazon region. They reach a great size in the upper Amazon, a full-grown specimen measuring nearly three feet in length by two in breadth. Its flesh is prized by both the "civilized" and the savage peoples living by the river. The eggs also are valued, scores of millions of which are gathered each season. Oil is extracted from these eggs, tens of thousands of gallons of which have been exported annually. Each turtle produces about one hundred twenty eggs every year. They issue from the river at the dead of night, when all is still, and making excavations two or three feet deep in the sand, turtle after turtle deposits its eggs in the same pit until it is full. The eggs are slightly larger than a hen's egg, are perfectly round, and have a flexible, leathery shell. To prepare them for eating, Brazilians boil them thirty minutes, then mix them with corn meal.

Alligators also infest in vast numbers the Amazon system of rivers. Indeed, they exist in myriads in some streams so

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

136 that "it is scarcely an exaggeration to say that the waters of the Solimoens are as well stocked with large alligators in the dry season, as a ditch in England is in summer with tadpoles."

The anaconda, (eunecetes murinus) or great water serpent, is another interesting creature. It has been known to reach a length of forty-two feet, and to girt four feet. Its greatest thickness is about half way between its head and tail, from which point it gradually tapers both ways. Some Brazilians eat the flesh of this creature.

A fish that interested me is the sting-ray, which looks like a huge, animated pancake. It is ten or twelve inches broad, three inches thick, and almost entirely limbless. Its nose projects only slightly, and it has a stub tail about three inches long armed with a poisonous spine. There are two holes on the upper side of the pancake for eyes, while the mouth is a slit on the under side. It swims very rapidly by an undulating motion of its rim. Near evening every day, these fish bury themselves in large numbers in the half floating mud near the edge of the water to feed, apparently; and if a bather should tread upon one, it will plunge its spur into his ankle instantly, causing a painful wound, difficult to heal. The Brazilians call the fish *lightning*. Its flesh is coarse and tough, and unfit for human food. It is very annoying to a fisherman when it bites his hook, for it seems to be endowed with nine lives, requiring a long time to die, and he dare not handle it because of the spur.

Another small, but dangerous fish, is the *piranha*. These fish exist in shoals in deep spots in the river sheltered from the current. They are never more than a foot in length, have a fearful array of sharp teeth, and are terribly voracious. A line dropped where they are, baited with a bit of meat, will have scarcely touched the water when a whirring sound will be heard and one of them will be on the hook and thousands more trying to get on. No one ventures to bathe where they are, for he might be fearfuly lacerated before escaping from the water.

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

The largest fish in the river are eight or ten feet in length and encased in an armor of big scales. Still other fish will be mentioned later. 136

After a five o'clock dinner one afternoon, we cast off again in order to take advantage of the current during the early part of the night. How strangely beautiful and romantic were the scenes that encircled us as we were borne quietly along on the bosom of the mighty, silent, placid flood and the shadows of night, pursuing the fleeing day, stole slowly over us! The boundless forest on both sides of the river, standing, or kneeling down into the water, seemed a vast guard of honor presenting arms, or two grand armies standing at attention. At length, calm and solemn night enveloped us in her sombre mantle. Two hours later, the full moon arose like a Queen of Glory in all her splendor, and radiated a flood of brilliant, delicious light that glorified river and forest and transfigured the savage world through which we were silently moving like spectres. I felt like exclaiming in the words of the Psalmist, "Praise ye him, sun and moon: Praise him all ye stars of light!" ooo

Soon, we reached a little hamlet called São José, that at the time of our visit, was in an advanced state of decay. This was the last outpost of "civilization," and the few people who lived here were cut off from the rest of the world and barely managed to eke out an existence. As I was sitting in our canoe one evening while we tarried here, some large fish heads that had been lying on the beach were thrown into the water; and the instant they struck the water, several fish one to two or more feet in length shot out of the water in the vicinity and glided, or ricochetted over the surface in every direction. They were frightened, apparently, by the large heads. We bought a fat cow here for three dollars and fifty cents and salted the meat down; but as the curing was not properly done, we finally lost the meat. [361] 123

We found a small group of the Karayá living at São José. We met the Karayá for the first time just before arriving here. They interested me greatly. Doubtless I appeared no [162]

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Chapter VII.

LIFE IN THE SAVAGE WORLD.—JUNGLE DINNERS.—SYLVAN DORMITORIES.—MIDNIGHT ADVENTURES.

Leaving São José, we entered an altogether savage world, encountering not a vestige of "civilization" again for six or seven hundred miles. We often journeyed part or all of the night, allowing ourselves to be borne along by the current. But I soon found traveling by night very dangerous, especially while we were in the upper part of the river, for there were many obstructions in the river; and the pilot, who was supposed to keep a sharp lookout so as to arouse the oarsmen when danger threatened, often fell asleep, with the result that both our lives and our property were imperiled. Frequently, as we floated quietly onward in the darkness and stillness of the night, we were suddenly thrown into intense excitement because threatened with destruction. But, we never suffered any harm. An unseen Power was caring for us, notwithstanding the carelessness of our canoe men.

As our beef spoiled, we had to depend upon fish and game for our meat, which we never lacked, usually having an abundance. As regards fish, it was much to our advantage that the river was still low. When it rises above its banks and submerges the contiguous country, which it does in places many miles inland, it is difficult to catch fish; one reason being that the fish now find a great abundance of food. We fished every day with hook and line as we floated along with the current, and usually caught very large fish—so

114 large, indeed, that one was sometimes sufficient to make two
136 meals for our entire party, notwithstanding our enormous eating capacity.

000 One day, I witnessed a new use for tobacco. A large fish having been hooked, and played until nearly exhausted, was drawn gradually alongside the canoe; then the angler, having masticated a big lump of tobacco, injected it into the mouth of the fish, causing it to stiffen instantly, with the tail slightly curved, in which condition, it was easily drawn into the canoe. If tobacco will paralyze a fish, can it fail to injure the human consumer?

114 As there were many kinds of water and tree fowls along
136 the river, we dined frequently upon game. At other times, wishing a still greater assortment of food, and to enjoy the chase, we disembarked for a few hours to hunt deer, pigs,
000 tapirs and the like. One morning, a nice pig having been taken in the thicket near the edge of the river, we landed on the first sand-bar for breakfast. Getting ashore, a few of our men set to work at once to prepare the pig, while the others watched the operation, each one evidently thinking of making a good meal, and the part he would select for his portion. The repulsive turkey-buzzards—the scavengers of South America—getting wind promptly of what was occurring, came to observe with an anxious, give-us-the-tripe look, and flopped and jumped about awkwardly, like sack racers, their constantly increasing numbers forming a black ring around us. Our colony of dogs, also, stole quietly about seeking an opportunity to levy upon something. Soon, the pig was cleaned and each of us chose his favorite part. The scene presented was amusing: One man, having roasted the liver at the camp fire, was eating it with a relish; another was stewing the heart; two others were roasting the hams with much solicitude, thinking of the feast they would have slicing and eating from them momentarily during the rest of the day and evening as they paddled, or floated onward in the canoes. The little, old Karayá captain, recently added to our crew as a pilot, had cheated the buzzards of the tripe, and

1 [i.e., Pig Tripe--Analyst]

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was baking it; a Cherente had chopped up the head and was stewing it, his appetite gaining in strength every moment. I contented myself with two slices of steak which I empaled on a spit and broiled.

These pigs subsist entirely upon wild fruits and vegetables, and the meat is excellent, especially if the animal is young. They have no layer of fat under the skin, as does the domestic pig. Some varieties roam about singly, while others go in herds of one or two hundred.

When an enemy approaches one of these herds, the alarm is given and they instantly arrange themselves in the form of a crescent, so Brazilian hunters say, and advance to the attack tossing their tusks constantly from side to side, grunting and snuffing, and emiting a disgusting odor. If the enemy does not quickly make his escape, he will be mangled. Jaguars always skulk near these swine bands, for they have but to steal up and seize a pig whenever they wish to dine. It is said that these great cats know well the danger of an attack by the pigs, so act discreetly. When one is hungry for pork, he conceals himself close to the line of march of the swine, lying in wait until the entire herd files past; then, as the last pig is passing, he springs suddenly upon it, breaks its neck, drops it, and scrambles up a tree. The unfortunate pig of course utters a squeel of alarm when seized, so its companions at once form in battle array and advance upon the foe. Soon, they encircle the spot where the victim lies dead, but seeing no enemy, they again form into line and move on. The jaguar, then descends and enjoys a quiet meal.

As we journeyed, we passed splendid grazing lands that appeared like beautiful meadows; next, we saw what resembled pretty apple orchards; then charming parks; then groves of shade trees where we almost expected to see a farmer's house; and finally, tracts of dense forest where the branches of the huge, spreading trees were heavily and elegantly draped and festooned with enormous masses of climbing vines. One of the many things that attracts one's attention in the Brazilian forest is the great extension of the branches of the trees,

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137 for they frequently appear to reach out from the trunk seventy or eighty feet.

114 We often disembarked at some charming arboreal palace to prepare and eat our food, for, on the sand-bars, we could not always obtain fuel, and were, moreover, exposed to the blistering heat of the sun. At such times, when we were not troubled by insects, we enjoyed a delightful picnic, with which our jungle banquet was in keeping. Occasionally, we were forced to pass the night in the forest. Late one afternoon, we disembarked in the forest for dinner; but before we had finished our repast, a storm broke and darkness closed in quickly upon us—darkness, too, that could almost be felt, obliging us, finally, to grope our way among the trees as if we were blind. It was unsafe to reembark, so we hastily pitched our tents while we could still see a little. I swung my hammock in my tent, and our motley company of canoe men stretched themselves side by side on the ground, forming a human carpet, over which I was suspended, like judgment. The dripping of the rain on our canvas house, the moaning and sighing of the wind through the forest, and the incessant rumble and boom of the thunder, were the only sounds. Soon, the strata of humanity on the ground was snoring loudly, undisturbed even by the bats that bled them on the toes. Some time after high night, because of the stillness, I gradually became conscious of the fact that the storm had ceased, then that the snoring also had ceased, succeeded by a continual slapping, for the mosquitoes had come in clouds and filled our tent, now that there was no rain or wind. "Let us go outside!" exclaimed Sépé, the Cherente, to his companions, and the tent was promptly vacated by all but myself. They imagined they would be free from the little pests in the open air, for, having filled a tent or a house, they torment the occupants all night long, whereas, in the open air, they are in motion but a short time. This time, however, there were myriads of mosquitoes outside the tent as well as in; and again Sépé called out, addressing me, "Shall we not go away from here at once?" I replied in the affirmative,

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for to sleep was impossible; and though the darkness was still so gross that we had to feel our way down to the river, we struck camp, tumbled everything into the canoes, then casting ourselves into the arms of the great, silent flood, were swept rapidly away. 114

We saw the tracks of the tapir everywhere, but did not have the good fortune to capture one while on the Araguaya. They always make for the water at full speed when alarmed, remaining below the surface a surprising length of time. When the jaguar springs upon the back of the tapir and tries to break its neck, he sometimes fails, for its neck is short, very thick and strong. It rushes madly toward the river at such times, dashing among the trees and through the dense underbrush, bolting under fallen trunks and bumping against some in a manner most unpleasant for its ferocious rider, so that he is usually glad to seize the first opportunity to dismount. The jaguar is known to have been killed in one of these wild stampedes, its neck being broken in collision with a tree. I have heard of such a horse and rider tearing through an encampment and among hammocks occupied by sleeping men. 136

We were often entertained at dawn by monkeys roaring their morning anthem. The great volume of sound seemed to indicate that there were a dozen of these vocalists and that they were a mile distant from us, when, in truth, there were but two and they only a quarter or half a mile distant. There are thirty or forty varieties of monkeys in the Brazilian forests, most of which will doubtless never be seen in zoological parks, for they cannot live in captivity, not even in their native land. We frequently saw colonies of one kind or another climbing about among the tree-tops, or sitting on their haunches observing us.

One day, we sighted far down the river in advance of us, what appeared to be two lines of soldiers drawn up at the water's edge. Studying the objects with a field glass, we found them to be a line of giant storks standing at the margin of the river waiting to seize their breakfast of fish.

Brazil.

136 They are as tall as a man, and, standing in line, their uniform black heads, white breasts and long, black legs, gave them a decidedly military appearance. The reflection in the water gave the illusion of a double line. I believe this is the largest bird that flies. It must have a long, clear space or it cannot rise. From standing humped up, like a goose on a cold day, it takes a few hesitating steps, then several determined strides, then breaks into a run, followed by a long series of big jumps and flapping of its huge wings, until, finally, it gets clear of the ground.

114 As we were borne along at night where the river was broad and deep and free of obstructions, all slept, or tried to sleep, excepting one or two watchers. My improvised bed in our large canoe was made of a large, square tin can, the side of a big tin wash-basin and the half of a gourd shell. My companions reclined on similar beds.

609 One obscure night, as we moved silently onward, like a giant phantom, we descried a light some distance ahead and heard Karayá shouting to us from a sand island. Fearing that they might not be friendly, and because of the darkness, our first thought was to pass on and not land where they [226] were. But a moment later, we discovered that they were a friendly fishing party; so we went ashore. As we drew [533] near to land, our Karayá pilot, Pedro Monco, sang one of their familiar tribal songs. It was of a joyful strain, though extremely peculiar, suggesting, somewhat, the running and bleating of a deer. tI is usually sung for the purpose of announcing to those on shore that visitors are arriving, that they are friendly, and that they are happy to meet their friends on land. Our trumpets were also sounded, and I played a hymn on the cornet. Our arrival appeared to give the fishing party much pleasure. The first thing they asked for was manioc meal and fish hooks. They were all in nature's dress, except the captain of the band, who wore a blanket.

262 Soon after we disembarked, which was past midnight, a [252] Karayá appeared with what resembled a skinned cat, and placed it over the fire to broil. "What is this?" I inquired.

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to color, then inject into the wounds a milky secretion taken from the skin of small frogs or toads. Therefore, when the new feathers grow out, they are of a brilliant yellow or orange color, without any mixture of blue or green, the natural color of the bird. It is said that when this new plumage is plucked, the next growth will still retain the new colors without further treatment. 232

Many of the mammals captured by the Karayá in infancy, become very tame. They are raised successfully, nursed either by a slut, or at the human breast. These tamed animals include various kinds of monkeys, the capibára, a rodent which becomes as large as a six-month old pig, agutís, picárres and tapirs. Of reptiles, the Karayá keep turtles, large lizards and alligators, the last named of which lie in pools of water on the sand bottoms, held captive by a cord around the body. The Karayáhy division has comparatively few domesticated creatures. 231 [184]

Like most of the South American tribes, the Karayá are primarily fishermen, obtaining their flesh food more from the river than from the forest. A few tribes, however, that do not live near streams of any importance, are compelled to rely almost wholly upon the chase for their meat, and so become more expert hunters than fishermen. As elsewhere stated, all the aborigines of South America, except the nomadic tribes, engage in agriculture to some extent, though to a very limited degree, except where they have obtained axes, grubbing-hoes and large knives from the civilized people. 433

The best time to fish along the Araguaya is during the rainless months from May to November, when the water is low, for when it rises, the fish are much more difficult to catch. During low water, the larger fish seek out the deep places in the river, where they may be easily taken. These places, which are well known to the natives, are above the smaller rapids, and also where there are certain rock formations which make deep holes, called *poços* by the Brazilians. 221 226

The fish of the Araguaya have the same characteristics as those of the Amazon valley in general. The giant pire, 221 [136]

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which attains a length of ten feet, occurs very frequently; also the electric eel, and the thick-bodied pirarára which is encased in an armor of strong, bony plates; the voracious piránha, the jahú, a scaleless fish nearly as large as a man; the pintado, or spotted fish, which reaches a length of six or seven feet; various pacús, besides many other kinds of fish. All of these are suitable for human consumption. There are certain scaleless fish which are not used by the Karayá. Neither will they eat the dolphin; but they are quite fond of the turtle and its eggs.

During the time of high water when fish are not easily caught in the yellow, earth-charged flood, the Karayá secure their fish from the lagoons along the river, which they make into great, natural traps for the larger fish by cutting off their retreat. This is accomplished by blocking the outlet of the lagoon with a basket-work of poles and heavy climbing vines. In former times, fish were taken exclusively by means of the bow and arrow, but the Karayá now use the hook and line, which is obtained in trade from passing canoes. It is for the most part impossible to fish in the Araguaya with a net because the piránha cut it to pieces, and also because of the many large creatures that infest the river.

Hunting is not so important an occupation with the Karayá as fishing, hence they are more expert anglers than hunters; nor do they display much skill in the chase. This may appear strange to persons who believe that all Indians are hunters, par excellence. South America is not so rich in large game as Africa; moreover, some superstition, the taboo, doubtless, prevents the savages from eating the flesh of some species of game which are most numerous. For this reason, the Karayá do not hunt the tapir, which abounds along the Araguaya, though the meat is excellent, being much like beef, yet richer. Deer also, of which there are many varieties, exist in great numbers; yet few, if any, of the savage tribes touch these animals. The Karayá never hunt large game, confining themselves to monkeys, which are abun-